

CLAIMS

1. A front electronic equipment system, comprising:  
a load electrical parts, provided at a front portion of a vehicle;  
5 a front electrical control unit, receiving a control signal for controlling the drive of the load electrical parts through a main bus line of the vehicle; and  
a drive control unit, connected to the front electrical control unit through a sub bus line, converting the control signal into a drive signal, and driving the load electrical parts based on the drive signal,  
10 wherein the front electrical control unit converts a communication protocol of the control signal from a communication protocol of the main bus line into a communication protocol of the sub bus line, and transmits the control signal received through the main bus line to the drive control unit through the sub bus line.
- 15 2. The front electronic equipment system as set forth in claim 1, further comprising an electronic connector, connected to the load electrical parts, wherein the drive control unit is provided in the electronic connector.
- 20 3. The front electronic equipment system as set forth in claim 2, wherein the load electrical parts is a plurality of the load electrical parts;  
the front electronic equipment system further comprising a first auxiliary equipment module on which a first load electrical parts of the plurality of load electrical parts is mounted; and  
25 wherein the electronic connector provided with the drive control unit

for driving the first load electrical parts is coupled with the first auxiliary equipment module.

4. The front electronic equipment system as set forth in claim 2, wherein  
5 the load electrical parts is a plurality of the load electrical parts;

the front electronic equipment system further comprising a second auxiliary equipment module on which a second load electrical parts of the plurality of load electrical parts and a sensor are mounted;

10 wherein the electronic connector provided with the drive control unit for driving the second load electrical parts is coupled with the second auxiliary equipment module;

wherein the drive control unit for driving the second load electrical parts converts a sensor signal outputted from the sensor into the control signal; and

15 wherein the drive control unit transmits the control signal to the front electrical control unit through the sub bus line.

5. The front electronic equipment system as set forth in claim 1, wherein the load electrical parts is a plurality of the load electrical parts;

20 the front electronic equipment system further comprising a first auxiliary equipment module on which a first load electrical parts of the plurality of load electrical parts is mounted; and

wherein the drive control unit for driving the first load electrical parts is provided at the first auxiliary equipment module.

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6. The front electronic equipment system as set forth in claim 1, wherein the load electrical parts is a plurality of the load electrical parts;

the front electronic equipment system further comprising a second auxiliary equipment module on which a second load electrical parts of the plurality of load electrical parts and a sensor are mounted;

wherein the drive control unit for driving the second load electrical parts is provided at the second auxiliary equipment module;

wherein the drive control unit for driving the second load electrical parts converts a sensor signal outputted from the sensor into the control signal; and

wherein the drive control unit transmits the control signal to the front electrical control unit through the sub bus line.

7. The front electronic equipment system as set forth in claim 3, wherein the first load electrical parts has at least one of a clearance lamp and a cornering lamp.

8. The front electronic equipment system as set forth in claim 5, wherein the first load electrical parts has at least one of a clearance lamp and a cornering lamp.

9. The front electronic equipment system as set forth in claim 4, wherein the second load electrical parts has a front washer motor; and

wherein the sensor mounted on the second auxiliary equipment module has a washer level sensor.

10. The front electronic equipment system as set forth in claim 6, wherein the second load electrical parts has a front washer motor; and

5 wherein the sensor mounted on the second auxiliary equipment module has a washer level sensor.

11. The front electronic equipment system as set forth in claims 1, wherein the front electrical control unit is connected to the drive control unit through a power source line; and

10 wherein the control signal is transmitted between the front electrical control unit and the drive control unit by a superposed communication at the power source line served as the sub bus line.